II. CLAIM AMENDMENTS

1. (Currently Amended) An Substituted Azetidine compound compounds of formula I,

$$R^1$$
 A
 A
 R^5
 R^3

wherein

A represents a -C=O-moiety,

 R^1 , R^3 , identical or different, represent a hydrogen atom or a linear or branched, saturated or unsaturated C_{I-4} -aliphatic group,

R² represents a hydroxyl group or a C_{I-3}-alkoxy group,

or R^1 and R^2 or R^2 and R^3 together form an -O-CH₂-CH₂-moiety, which is optionally substituted with one or more methyl groups

 R^4 represents a hydrogen atom, an optionally at least mono- substituted aryl group, or a linear or branched, saturated or unsaturated aliphatic group, which may be substituted by one or more substituents independently selected from the group consisting of hydroxy, fluorine, chlorine, bromine, branched or unbranched C_{I-4} -alkoxy, branched or unbranched C_{I-4} -perfluoroalkoxy and branched or unbranched C_{I-4} -perfluoroalkyl,

R⁵ represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group,

R⁶ represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group,

with the provisos

that if R² is alkoxy, at least one of R¹, R³, R⁴, R⁵ And R⁶ does not represent a hydrogen atom,

that if R^4 represents a hydrogen atom and one *of* the residues R^5 and R^6 represents a hydrogen atom, then the other one *of* these residues R^5 and R^6 does not represent a methyl group, which is substituted by an -NH₂-moiety or an azaheterocycle, and

optionally in form of one of the stereoisomers, a racemate or in form of a mixture of at least two of the stereoisomers, in any mixing ratio, or a corresponding salt thereof, or a corresponding solvate thereof.

- 2. (Currently Amended) <u>A compound</u> Compounds according to claim 1, characterized in that R^1 and R^3 , identical or different, represent a hydrogen atom or a linear or branched C_{1-4} -alkyl group.
- 3. (Currently Amended) <u>A compound</u> Compounds according to claim 1, characterized in that R^1 and R^3 are identical and represent a C_{l-4} alkyl group.
- 4. (Currently Amended) <u>A compound</u> Compounds according to claim 1, characterized in that R² represents a hydroxyl group or a methoxy group.
- 5. (Currently Amended) A compound Compounds according to claim 1, characterized in that R^4 represents a hydrogen atom, an optionally at least mono-substituted phenyl group, or a linear or branched, saturated or unsaturated C_{l-6} aliphatic group, whereby said aliphatic group may be substituted by one or more substituents independently selected from the group consisting of hydroxy, fluorine, chlorine, bromine, branched or unbranched C_{l-4} perfluoroalkoxy and branched or

unbranched C_{I-4}-perfluoroalkyl, preferably a hydrogen atom, a methyl group or an unsubstituted phenyl group.

- 6. (Currently Amended) A compound Compounds according to claim 5, characterized in that R^5 represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono- substituted C_{l-6} aliphatic group.
- 7. (Currently Amended) A compound Compounds according to claim 1, characterized in that R^6 represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono- substituted C_{l-6} aliphatic group.
- 8. (Withdrawn) Compounds according to claim 1, characterized in that R^7 , R^8 , R^9 , R^{10} , independent from one another, represent a linear or branched, saturated or unsaturated, optionally at least mono-substituted C_{l-6} aliphatic group.
- 9. (Currently Amended) A compound Compounds according to claim 1 of formula I,

wherein

A represents a -C=O-moiety,

R¹, R³ both identically represent an iso-propyl group or a tert-butyl group,

R² represents a hydroxyl group or a methoxy group,

or R^1 and R^2 or R^2 and R^3 together form an -Q-CH₂-C(CH₃)₂-chain, whereby the oxygen atom of said chain is bonded to the 4- position of the phenyl ring,

R⁴ represents a hydrogen atom, a methyl group or an unsubstituted phenyl group,

R⁵ represents a bromine atom, or a hydroxyl group,

R⁶ represent a hydrogen atom, a methyl group or a hydroxyl group,

optionally in form of one of the stereoisomers, a racemate or in form of a mixture of at least two of the stereoisomers, in any mixing ratio, or a corresponding salt thereof, or a corresponding solvate thereof.

- 10. (Currently Amended) <u>A compound</u> Compounds according to claim 1 selected from the group consisting of
- [1] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy- azetidin-1-yl)-methanone;
- [3] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-3- methyl-azetidin-1-yl)-methanone;
- [4] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-2- methyl-azetidin-1-yl)-methanone;
- [7] (3-Bromo-azetidin-1-yl)-(3,S-di-tert-butyl-4-hydroxy- phenyl)-methanone;
- [9] (3,5-di-tert-butyl-4-methoxy-phenyl)-(3-hydroxy- azetidin-1-yl)-methanone;
- [10] (3-hydroxy-azetidin-1-yl)-(4-hydroxy-3,S-diisopropyl- phenyl)-methanone;
- [12] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-2- phenyl-azetidin-1-yl)-methanone;
- [14] (7-tert-butyl-3,3-dimethyl-2-3-dihydro-benzofuran-S- yl)-(3-hydroxy-azetidin-1-yl)-methanone;

optionally in form of a corresponding salt or a corresponding solvate.

Atty Docket: 785-011733-US PAR

11. (Currently Amended) Process for the preparation of <u>an</u> substituted azetidine <u>compound</u> compounds of formula I according to of <u>claim 1</u> claim1, characterized in that at least one compound of formula II,

wherein R1-R3 have the meaning according to <u>claim 1</u> claim 1, X represents a bond and R represents a carboxy group or an activated carbonyl group, is reacted with at least one compound of formula III,

optionally in the form of a corresponding salt, wherein R^4 - R^6 have the meaning according to claim 1, to yield a compound of formula I according to claim 1, wherein A represents a -(C=O)-moiety which is optionally purified and/or optionally isolated.

- 12. (Currently Amended) Medicament comprising at least one substituted azetidine compound according to of claim 1 and one or more pharmaceutically acceptable excipients.
- 13. (Currently Amended) A method for the prophylaxis and/or treatment of cyclooxygenase-1 or cyclooxygenase-2 related disorders comprising administering to a patient in need thereof a cyclooxygenase-1 or cyclooxygenase-2 inhibiting amount of the medicament according to claim 12.

USSN 10/804,505

Atty Docket: 785-011733-US PAR

14. (Cancelled)

15. (Currently Amended) A method for the prophylaxis and/or treatment of pain comprising administering to a patient in need thereof a pain inhibiting amount of the

medicament according to claim 12.

16. (Currently Amended) A method for the prophylaxis and/or treatment of

inflammation comprising administering to a patient in need thereof an inflammation

inhibiting amount of the medicament according to claim 12.

17. (Currently Amended) A method for the prophylaxis and/or treatment of

inflammation according to claim 16 where the inflammation is the result of a disorder

selected from the group consisting of arthritis, rheumatoid arthritis,

spondyloarthropathies, gouty arthritis, osteoarthritis, systemic lupus erythematosus,

juvenile arthritis, rheumatic fever, symptoms associated with influenza or other viral

infections, common cold, lower back pain, neck pain, dysmenorrhea, headache,

toothache, sprains, strains, myositis, neuralgia, synovitis, gout, ankylosing spondylitis,

bursitis, edema, inflammations following dental procedures, inflammations following

dental procedures, vascular diseases, migraine headaches, periarteritis nodosa,

thyroiditis, aplastic anemia, Hodkin's disease, sclerodoma, type I diabetes, myasthenia

gravis, sarcoidosis, nephrotic syndrome, Behcet's syndrome, polymyositis, gingivitis,

hypersensivity, conjunctivitis, swelling ocurring after injury and myocardia ischemia.

18-22. (Cancelled)

23. (Currently Amended) A compound Compounds according to claim 1 where the

stereoisomers are enantiomers or diastereomers.

24. (Currently Amended) A compound Compounds of claim 3 where the C_{I-4}- alkyl

group, is a C_{3-4} alkyl group.

25. (Currently Amended) A compound Compounds of claim 3 where a C_{I-4}- alkyl group,

is an iso-propyl group or a tert.-Butyl group.

7

- 26. (Currently Amended) <u>A compound Compounds</u> of claim 1 where R⁶ represents a hydrogen atom, a hydroxyl group or a methyl group.
- 27. (Currently Amended) <u>A compound Compounds</u> according to claim 1, characterized in that R^7 , R^8 , R^9 , R^{10} , independent from one another, represent a –linear or branched C_{l-6} alkyl group.

28-35. (Cancelled)

- 36. (Currently Amended) A medicament comprising at least one substituted azetidine compound according to claim 2 and one or more pharmaceutically acceptable excipients.
- 37. (Currently Amended) A medicament comprising at least one substituted azetidine compound according to claim 3 and one or more pharmaceutically acceptable excipients.
- 38. (Currently Amended) A medicament comprising at least one substituted azetidine compound according to claim 4 and one or more pharmaceutically acceptable excipients.
- 39. (Currently Amended) A medicament comprising at least one substituted azetidine compound according to claim 5 and one or more pharmaceutically acceptable excipients.
- 40. (Currently Amended) A medicament comprising at least one substituted azetidine compound according to claim 6 and one or more pharmaceutically acceptable excipients.
- 41. (Currently Amended) A medicament comprising at least one substituted azetidine compound according to claim 7 and one or more pharmaceutically acceptable excipients.

USSN 10/804,505

Atty Docket: 785-011733-US PAR

42. (Currently Amended) A medicament comprising one or more pharmacologically acceptable excipients and at least one substituted azetidine compound of formula I,

$$R^1$$
 R^3
 R^4
 R^5

wherein

A represents a -C=O-moiety,

 R^{1} , R^{3} , identical or different, represent a hydrogen atom or a linear or branched, saturated or unsaturated C_{l-4} -aliphatic group,

R² represents a hydroxyl group or a C_{I-3}-alkoxy group,

or R^1 and R^2 or R^2 and R^3 together form an -O-CH₂-CH₂-moiety, which is optionally substituted with one or more methyl groups,

 R^4 represents a hydrogen atom, an optionally at least mono- substituted aryl group, or a linear or branched, saturated or unsaturated aliphatic group, which may be substituted by one or more substituents independently selected from the group consisting of hydroxy, fluorine, chlorine, bromine, branched or unbranched C_{l-4} -alkoxy, branched or unbranched C_{l-4} -perfluoroalkoxy and branched or unbranched C_{l-4} -perfluoroalkyl,

R⁵ represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group,

Atty Docket: 785-011733-US PAR

R⁶ represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group with the provisos

that if R⁴ represents a hydrogen atom and one of the residues R⁵ and R⁶ represents a hydrogen atom, then the other one of these residues R⁵ and R⁶ does not represent a methyl group, which is substituted by an -NH2-moiety or an azaheterocycle, and

optionally in form of one of the stereoisomers, a racemate or in form of a mixture of at least two of the stereoisomers, in any mixing ratio, or a corresponding salt thereof, or a corresponding solvate thereof.